



# lic. phil. Esther Bisig

Swiss Military Academy at ETH Zurich Kaserne Reppischtal 8903 Birmensdorf SWITZERLAND

Esther.Bisig@vtg.admin.ch

### Tineke Hof, MSc

TNO Defense, Security and Safety Kampweg 5, P.O. Box 23 3769 ZG Soesterberg NETHERLANDS

Tineke.Hof@tno.nl

# Dr. phil. Tibor Szvircsev Tresch

Swiss Military Academy at ETH Zurich Kaserne Reppischtal 8903 Birmensdorf SWITZERLAND

Tibor.Szvircsev@vtg.admin.ch

# Dr. phil. Ann-Renée Blais

Defence R&D Canada (DRDC) 1133 Sheppard Ave. West, P.O. Box 2000 Toronto, Ontario M3M 3B9 CANADA

ann-renee.blais@drdc-rddc.gc.ca

# Dr. phil. Stefan Seiler

Swiss Military Academy at ETH Zurich Kaserne Reppischtal 8903 Birmensdorf SWITZERLAND

Stefan.Seiler@vtg.admin.ch

#### CAPT (N) Yantsislav Yanakiev, Dr. Sc.

Defense Advanced Research Institute G.S. Rakovski National Defense Academy 82 Evlogi & Hristo Georgievi Blvd 1504 Sofia BULGARIA

yanakievy@md.government.bg

# **ABSTRACT**

Transformation of military operations demands new tools to support the performance of coalition forces in multinational operations.

This paper contributes to one of the fundamental objectives of SAS-081/RSY, namely to the objective to share experience from the implementation of methods and tools and latest research results in support of transformation and management in the new security environment. In addition, it focuses on the cognitive and human aspects of defence transformation.

<u>The goal of the paper</u> is to investigate potential models and tools for understanding, explaining, and measuring organisational effectiveness of coalition HQs conducting Non-article 5 crisis response operations.

The paper will present intermediate results of the work of NATO RTO HFM Task Group (TG)163 "Improving Organisational Effectiveness of Coalition Operations", which is composed of researchers from 11 nations (i.e., eight NATO, two PfP and one MD). In addition, NATO ex-officio bodies are represented in the group (i.e., NATO Defence College, NATO School SHAPE and NATO SACT).

<u>First</u>, HFM RTG 163 organized subject matter experts (SMEs) discussions at NATO School SHAPE and at NATO Allied Command Transformation to define the term "organisational effectiveness" of coalition HQs at the operational level and to categorize factors critical to organisational effectiveness.

<u>Second</u>, the TG drafted a theoretical model of organisational effectiveness, based on the results of SMEs discussions, a literature review of the relevant models and variables, as well as products other NATO

	Report Docume		OMB No. 0704-0188			
maintaining the data needed, and of including suggestions for reducing	llection of information is estimated to completing and reviewing the collect this burden, to Washington Headquuld be aware that notwithstanding an OMB control number.	tion of information. Send comment larters Services, Directorate for Inf	s regarding this burden estimate or formation Operations and Reports	or any other aspect of the 1215 Jefferson Davis	is collection of information, Highway, Suite 1204, Arlington	
1. REPORT DATE APR 2010		2. REPORT TYPE <b>N/A</b>		3. DATES COVE	RED	
4. TITLE AND SUBTITLE				5a. CONTRACT	NUMBER	
Improving Organia	sational Effectivene	ss of Coalition Ope	rations	5b. GRANT NUMBER		
			5c. PROGRAM ELEMENT NUMBER			
6. AUTHOR(S)				5d. PROJECT NUMBER		
			5e. TASK NUMBER			
			5f. WORK UNIT NUMBER			
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)  Swiss Military Academy at ETH Zurich Kaserne Reppischtal 8903  Birmensdorf SWITZERLAND  8. PERFORMING ORGANIZATION REPORT NUMBER						
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)		
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION/AVAIL	LABILITY STATEMENT lic release, distributi	on unlimited				
	OTES 88. Analytical Suppo la Defense). RTO-M		sformation (Le so	outien analyti	que a la	
multinational oper namely to the obje- research results in	military operations ations. This paper continuous. This paper continuous to share expering support of transforms on the cognitive and	ontributes to one o lence from the impl mation and manag	f the fundamental ementation of me ement in the new s	objectives of thods and too security envir	SAS-081/RSY, ols and latest	
15. SUBJECT TERMS						
16. SECURITY CLASSIFICATION OF: 17. LIMITATION OF 18. NUMBER 19a. NAME OF						
a. REPORT	b. ABSTRACT	c. THIS PAGE	– ABSTRACT <b>SAR</b>	OF PAGES 20	RESPONSIBLE PERSON	
unclassified	unclassified	unclassified	D.III	<b>∠</b> U		





RTGs had developed; for example, the CTEF Model developed by HFM-087, and the Network Enabled Capability (NNEC) C2 Maturity Model developed by SAS-065. The model implies that most important for organisational effectiveness is strategically aligning Structure, People, Processes, and Culture towards the organisation's operative goals, which are a) effective and timely sharing of information, b) quick and timely decision making, and c) improved shared awareness of tasks and responsibilities.

<u>Third</u>, based on this theoretical model the TG developed a draft instrument (i.e., questionnaire) for data collection that can be used to 1) investigate the impacts of different influencing factors, 2) localize inefficiencies in NATO headquarters (HQ), and 3) determine measures to achieve better organisational effectiveness of coalition HOs.

# INTRODUCTION

The end of the Cold War implicated downsizing the number and pruning the budget of armed forces. Simultaneously, the number and tasks of missions escalated due to the unblocking of the UN Security Council. Nowadays, missions range from peacekeeping, peace enforcement, anti-terrorist action, policing, to humanitarian aid [23, 42]. Furthermore, the changing security situation (e.g., attacks of the 11 September 2001) showed that neither do national borders adequately protect against external threats nor does geographical distance play a significant role in the security-political analysis of a state [29]. Consequently, multinational alliances and cooperation between armed forces of different nations are more important today than ever before.

However, this "internationalization of military life" [30] in the last twenty years has led to new organisational challenges, too. The collaboration of forces with different weapons, information and communication systems requires not only technological interoperability, but their national background with different languages, leadership styles, rotation systems, trainings, military traditions, hierarchy systems and so forth also demand a high level of non-technical interoperability. Thus, the interaction of a complex socio-technical system where structure, processes, people, and culture are aligned towards goal achievement is essential to fulfil missions successfully and effectively. Though, the multinationality of these coalition operations impedes their organisational effectiveness.

In order for these operations to achieve and maintain their organisational effectiveness at a high level, adaptive, flexible, and mobile forces are needed [11]. NATO meets this challenge by a transformation process emphasizing "reduction in size and readiness", "increasing flexibility and mobility", and "multinationality" [35].

This paper ties in with the above-mentioned issue of multinationality and investigates potential models and tools for understanding, explaining, and measuring organisational effectiveness of coalition headquarters (HQ) conducting non-article 5 crisis response operations. Its aim is also to provide a theoretical basis for the formulation of recommendations regarding how to improve their organisational effectiveness. It is the result of the work of NATO Research and Technology Organisation (RTO) Task Group HFM-163 "Improving Organisational Effectiveness of Coalition Operations", which is composed of researchers from 11 nations (i.e., eight NATO, two Partnership for Peace and one Mediterranean Dialogue country). In addition, several NATO ex-officio bodies are represented in the group (i.e., NATO Defence College, NATO School SHAPE and NATO SACT).

The goal of this paper is 1) to define what military experts mean by organisational effectiveness, 2) to outline the existing theories and models of organisational effectiveness, 3) to assess how these models can be combined to form a new model of organisational effectiveness of peace-promoting multinational operations' HQs, 4) to investigate which factors influence this effectiveness, and 5) to understand how effectiveness can be measured.

27 - 2 RTO-MP-SAS-081



### ORGANISATIONAL EFFECTIVENESS

#### **Definition**

Generally speaking, the term organisational effectiveness describes the degree to which an organisation reaches its goals [17]. This section of the paper addresses how experts in the military field fill this broad definition of the term organisational effectiveness with HQ-specific content. It presents the analysis of the results obtained from Subject Matter Experts (SMEs) discussions carried out in the framework of the Task Group HFM-163 in NATO School, Oberammergau, Germany in October 2008 and in NATO Allied Command Transformation, Norfolk, VA, USA in June 2009. The two groups of SMEs comprised commissioned officers with diverse national backgrounds and with extensive experience in multinational NATO operations, including the International Stabilization and Assistance Force (ISAF) HQ. The objective of the SMEs discussions was threefold: 1) to help define the term organisational effectiveness of NATO coalition operations, 2) to identify barriers to organisational effectiveness of NATO HQs at the operational level, and 3) to summarize suggestions for improving organisational effectiveness of multinational NATO HQs.

The experts described the effective coalition HQs as "able to achieve the goals", "able to make a decision quickly", "providing orientation for the commanders", "having good leadership", "adaptable to change", "adjusting quickly to the changing situation", "able to learn from mistakes", "producing information for sharing with others", "able to go beyond task description and taking initiative" and "open to diverse cultures".

The factors influencing organisational effectiveness of coalition operations that act as barriers for successful cooperation, according to the SMEs, can be clustered in four groups:

The first group contains factors related to *political-military decision making*. Among the most frequently mentioned problems are "unclear and unstable goals, changing tasks, and lack of common understanding of goals and missions end state" among the coalition partners. In addition, according to the experts, the "lack of a comprehensive approach to doctrines and concepts" is a major problem. Another important issue is "different national and NATO education and training systems and different amounts of experience in multinational operations". The experts agreed "there is still a lack of NATO pre-deployment training". Moreover, a traditional barrier to organisational effectiveness of coalition operations is the capabilities and technological gap among the coalition partners as well as a "lack of adequate resources allocated to implement the mission". Among many other important challenges, the "lack of technological interoperability" in national systems hampers information sharing and creates difficulties for cooperation among the different contributing nations in the coalition. Last, SMEs considered "nation-centric politics, related to imposing restrictive caveats to employ the troops during the operation" as a major negative influence on the coalition operation's effectiveness. The problem is that "the troops are forced to work around these political barriers, which at times increases the immediate risk to the people on the ground and undermines the trust among coalition partners".

The second group includes factors related to *processes management* in NATO HQ. Among the most frequently discussed issues were "different rotation timeframe among national positions in the HQ" and "the lack of synchronisation of national rotations". In this regard, experts concurred "different rotation cycles hurt organisational effectiveness", creating difficulties in the adaptation among the national representatives and in the development of social networks. In addition, some of the experts identified as a problem the "rapid turnover of leadership and personnel" hampering the learning process. Some of the experts considered "the tour of length too short" (typically 4-6 months) and argued that "learning takes a long time to develop, as does the social network, and then you are getting ready to come home". On the other end, a few SMEs mentioned that "most of nations prefer comparatively short periods of rotation because of the high intensity of the operations related with high stress to military personnel". Obviously,





this is a problem deserving of particular attention and additional investigation. The next important barrier to organisational effectiveness according to SMEs is the "lack of organisational knowledge because lessons learned are not systematically passed on". This relates to the organisation of the process of handover of the positions in the HQ and the willingness of the representatives of different nations to share information with their successors. From a national standpoint, the experts considered problematic the fact that "there is no debriefing for many personnel returning from a NATO assignment." Another important barrier to effectiveness of coalition HQs according to the experts has to do with a "lack of communication and poor information sharing process". The problems here are multidimensional, technological and human in nature. Some typical situations include "people not wanting to share information", "lack of social networking opportunities", "lack of info sharing systems" and "lack of understanding of team members' information needs".

The third group of factors allude to the *people* in the organisation. One of the most important barriers according to the experts is the "lack of adequate manning". The SMEs shared the opinion that "frequently, individuals are not qualified for their assigned role" and that "some nations never contribute, but merely ride out their time." This situation generates problems with respect to a reasonable distribution of tasks and responsibilities among collation partners as well as to the development of internal social networks in the HQ. Another concern is the "lack of cultural awareness training" of the personnel, participating in NATO multinational operations. Related to this issue is "the quality of English communication". The problem is multifaceted. On the one side, "non-native English speakers often do not comprehend the meaning or context of English speech". On the other side, "native English speakers also have difficulties with non-native speakers and therefore, sometimes assume incompetence on the part of non-native English speakers. Another problem is the use of NATO abbreviations and so-called "NATO slang," which further hinders communication.

Finally, the fourth group of factors relates to the influence of cultural differences on organisational effectiveness and the process of formation of a unique organisational culture in the NATO HQ. The experts described the organisational culture of a NATO HQ as a mixture of different national, military and service cultures affecting its organisational effectiveness. A typical example in this regard is "the mental process of uncertainty overcoming," related to cognitive culturally-based biases in the need for information to make a decision. This process may affect decision making if an individual needs more information or is afraid of making an incorrect decision. Both cases can undermine organisational effectiveness of the HQ. Another essential issue is "the effect of different leadership styles" (e.g., direct vs. indirect) which can lead to a misunderstanding or misperception of the intention of the leader. The experts were unanimous with respect to the role of leadership as a factor that shapes the organisational culture in the HQ and thus influences effectiveness of coalition operations. The role of the leader and specific leadership capabilities in a multinational environment are critical factors regarding establishing shared vision and awareness with respect to goals and tasks. In this regard, the experts suggested the "leader be committed to the mission, not to the nation." Another factor which deserves attention, also influenced by different national cultures, is "task orientation versus the need to spend time building and maintaining relationships". Lastly, the experts identified as a potential problem the "lack of individual, organisational and national trust". The issue of trust among coalition partners deserves particular attention because it is related to information sharing and the coalition operations' effectiveness as a whole.

According to the experts, the enablers of organisational effectiveness include the improvement of processes in the HQ as well as strategic decision-making when planning and implementing a NATO operation. A few of their suggestions regarding the organisational structure and culture follow.

The first group of recommendations has to do with strategies for *processes improvement* in NATO HQs. The experts were unanimous regarding the role of information sharing as an enabler of organisational effectiveness of a coalition HQ as illustrated by the statement "the more understanding of where information comes from the better". In order to improve the information sharing process, a strategy for

27 - 4 RTO-MP-SAS-081

# NATO OTAN

### **Improving Organisational Effectiveness of Coalition Operations**

changing people's mind and attitude "not wanting to share" has to be implemented. A full-spectrum technical interoperability among coalition partners also has to be put in place. Another important enabler of organisational effectiveness of coalition operations is related to the development of the HQ as a learning organisation. The SMEs suggested "introducing Standing Operating Procedures (SOPs) in order to avoid gaps of changeover" and "to transfer lessons learned". In addition, they considered important to introduce "effective mentoring program to support hand-over procedure so you don't start from scratch every time" and to "learn from the mistakes" of their predecessors. Besides, the experts considered the "process of social networking" and development of "informal networks" as key elements in reaching organisational effectiveness. In this regard, they suggested "ad hoc meetings in open environment in multicultural settings" be organized, as well as the creation of "opportunities for people to talk to each other informally" such as ice-breakers/social events and the use of the officer's club for social networking. Moreover, SMEs rated among the most important factors that influence coalition HQs' effectiveness "an unreserved commitment from the senior leadership in the HQ". They agreed "the HQ will be effective if the leader is not there to serve the nation but to make the HQ work". Having in mind the complex character of current NATO operations, SMEs identified the need for leaders to be able to prioritize conflicting items.

The second group of suggestions relates to improving the *strategic decision-making process of planning and conducting* a NATO coalition operation. Among the most discussed issues is the need to introduce "NATO standardization for education and training for coalition operations". The experts commented "HQ staff has to have prior experience working together as a group". In addition, they considered the "predeployment training on how to work in NATO/coalition environment as a must". Finally, SMEs deemed "elimination of national political caveats for mission execution" a priority task because "this challenges trust among nations".

The recommendations of the SMEs with respect to *structural factors* that influence coalition operation effectiveness were focused on the format of cooperation (i.e., lead nation - framework nation - multinational formation). They gave priority to multinational cooperation, which was characterized by the statement "no single nation has to be predominantly represented on HQ staff."

Finally, with respect to *culture*, the experts' suggestions had to do with improving the cross-cultural education and training and building intercultural competencies among the NATO HQ staff. In addition, they considered development of "NATO HQ culture", "pushing for development of NATO identity" and to "be more NATO-oriented than nation-oriented" to be critical.

To summarize, at the beginning of the discussions, the experts did not distinguish clearly between the broad term "operational effectiveness", representing factors external to an organisation, and the term "organisational effectiveness", targeting the internal capabilities of an organisation. Therefore, they focused on external preconditions for successful cooperation, namely political-military decision making regarding planning and participation in NATO coalition operations. In the course of the discussions, however, they agreed upon the description of the effective coalition HQ as an organisation with the basic characteristics summarized in Table 1 below.



Table 1: Basic Characteristics of An Effective Coalition HQ

	Political-military decision making	Internal processes management	People	Cultural differences
•	Able to achieve its goals Establishing priorities	Learning organisation     Stimulating information sharing     The HQ is willing to adapt its structures to the ever-changing conditions where necessary     Processes improvement strategies implementation to facilitate information sharing, social networking and top leaders' commitment to achieving HQ goals     Making efficient use of the available resources	Able to take initiative     The leaders are able to make fast and timely decisions     Existing flexible human resources management system to guarantee high motivation, cohesion, organisational and interpersonal trust	Openness to diverse cultures; development of intercultural competences     Using common language and terminology     Using common formats/standardization of different procedures     Using common doctrine and concepts

# Review of Organisational Effectiveness Models and Approaches

After a brief description of the SMEs' recommendations, we now introduce theoretical approaches and existing models of organisational effectiveness. Based on these concepts, we designed a model tailored to coalition HQs. We describe and discuss three distinct models – the *Command Team Effectiveness (CTEF) Model* [16], the *Star Model* [19], and the *7-S-Model* [37] – and the *Internal System Approach* to organisational effectiveness and then adapt their conceptual ideas to our purposes.

# **Command Team Effectiveness Model**

The Command Team Effectiveness (CTEF) Model [16] (Fig. 1) enables the observation, evaluation, and promotion of group activities. The model is based on the assumption that successful leaders have to understand and take into account the following factors: 1) conditions (i.e., operation framework, task, organisation, leader, team members, and team), 2) behaviour and processes occurring during the operation (a distinction is made between behaviour/processes related to tasks and those related to groups), 3) evaluating the result of these processes (again distinguishing between behaviour related to tasks and groups), and 4) adapting processes and conditions in order to become more effective.

27 - 6 RTO-MP-SAS-081

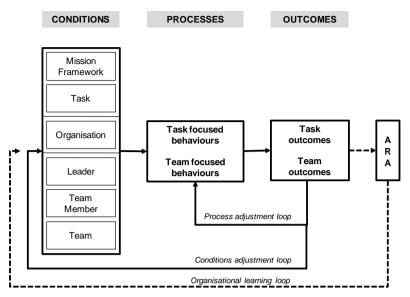


Figure 1: CTEF Model [16]

This model was developed by a NATO RTO task group. Existing models were used as an inspiration to identify the different factors [e.g., 14, 39, 31, 10]. Moreover, articles and chapters on organisational effectiveness were consulted and interviews with experts were conducted.

The advantages of this model are its strong theoretical foundation, and the fact that it includes learning and adjustment loops and takes the mission framework and context into consideration. However, it lacks the (inter-)cultural aspects of multinational operations. Additionally, its focus on team and task characteristics, does not match a HQ's perspective. At the HQ level, there are other vulnerabilities, for example, organisational culture and structure. Another drawback of the CTEF model is its complex cause-and-effect structure, which can only be verified partially in practice.

#### Star Model

The basic premise of Galbraith' Star Model [19] (Fig. 2) is simple but powerful: Different strategies require different organisations to execute them. The Star Model framework for organisational design is the foundation on which an organisation bases its design choices. This framework consists of a series of design policies that can be influenced by leadership and impact employee behaviour. The policies are the tools with which leaders must become skilled in order to shape the decisions and behaviours of their organisations effectively. In the Star Model, design policies fall into five categories: strategy, structure, processes, rewards and people.



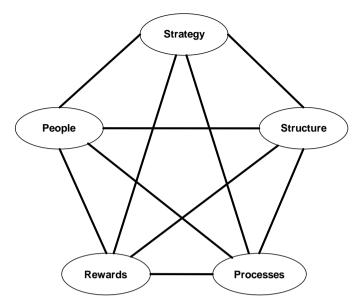


Figure 2: Star Model [19]

In order to be effective as an organisation, all these policies must be aligned, interacting harmoniously with one another. This idea of alignment is fundamental to the Star Model. But to solely focus on aligning, the organisation is to become vulnerable, because alignment around a focused strategy can impede the adaptation of a new strategy. Today, every organisation needs to be adaptive and able to change as quickly as its context may change. If not, it risks falling behind. And if change is constant, an organisation needs to be designed so as to be constantly changeable. Organisational structures and processes have to be easily reconfigured and realigned with a constantly changing environment. This asks for the skilled use of extensive internal and external networking capabilities [19].

One advantage of this model is the concept of strategic alignment. This alignment of the diverse policies ensures goal-oriented functioning and therefore, organisational effectiveness. Another of its advantages is the consideration of the notion of adaptability to a constantly changing environment. Nevertheless, the Star Model is not tailored to the organisation of a NATO HQ – but rather to business and market-oriented companies. Other weak points are that effectiveness is not a direct output of the design policies and culture is only understood as an output, not as an input. For our purposes, that is, in a multinational HQ where people from different nations are working together, culture has to be seen as an input variable as well.

### 7-S-Model

The 7-S-Model of the former McKinsey management consultants Peters and Waterman Jr. [37] divide organisations into "hard" and "soft" factors. The "hard" factors cover concrete elements that can be exposed with policy papers, plans, and documentation on the development of the organisation. The three "hard" or "cold" factors of an organisation are strategy, structure, and systems. The expression "soft" refers to substantially and only marginally concrete elements of an organisation that can hardly be described. These elements develop permanently and can be planed or controlled only limitedly because they are highly dependent on the members of the organisation. These "soft" or "warm" factors are namely skills, staff, style/culture, and shared values/superordinate goals (Fig. 3). While the hard factors are easier to test, the assessment of the soft factors is much more difficult, albeit they are at least as important for the organisation.

27 - 8 RTO-MP-SAS-081

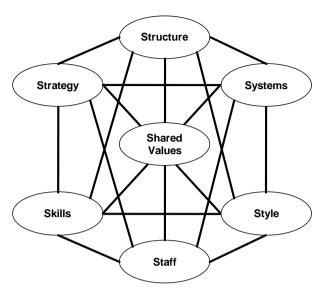


Figure 3: 7-S-Model [37]

Effectively functioning organisations are characterized by a coordinated balance of theses seven factors. In times of change and adjustment, it should be noted that the modification of one factor also has an impact on the other factors. A well-functioning organisation must aspire to reach the right balance between the above introduced factors. In practice, it is often the case that leaders are only focusing on the hard factors. Peters and Waterman Jr. [37] argue, however, that the most successful organisations focus their attention also on the optimum balance of the soft factors as they can be decisive for success because new structures and strategies can barely be built on completely opposed cultures and values.

This praxis proven model has the advantage of taking into consideration hard as well as soft factors and emphasizing the importance of a balance between those factors.

#### **Internal System Approach to Organisational Effectiveness**

The internal system approach to organisational effectiveness examines the organisation's functioning from the inside. Effectiveness is assessed by indicators of internal conditions and efficiency, such as efficient use of resources and harmonious coordination between departments. Managers, therefore, generate goals that they can use to assess how well the organisation is performing. Jones [28] describes two types of goals that can be used to evaluate organisational effectiveness: official goals and operative goals. Official goals are the organisation's guiding principles that are usually formally stated in its annual report and in other public documents. Typically these goals describe the mission of the organisation —why does the organisation exist and what should it be doing. Operative goals are specific goals that put managers and employees on the right track as they perform the work of the organisation. Managers can use operative goals, such as reduce decision-making time, increase motivation of employees, or reduce conflict between organisation members, to evaluate organisational effectiveness. Organisations must be careful to align their official and operative goals and remove any tension between them [28].

# **Preliminary Conclusions on the Models**

These approaches and models have different foci and cover different aspects of organisational effectiveness. The aim of this paper is to combine the aspects that are most relevant and applicable to the effectiveness of coalition HQs to form a new, tailored model.





Based on the analysis of the results from SMEs discussions and a literature review, we define organisational effectiveness in NATO HQs as the degree of fit, or alignment, among various dimensions of organisations such as organisational structure, processes, people and culture towards goal achievement. In addition, experts' discussions led us to the conclusion that the main (official) goal of a NATO HQ is to support the troops on the ground. Furthermore, we made a decision to evaluate the organisational effectiveness of NATO HQs by assessing the following operative goals: a) effective and timely sharing of information, b) quick and timely decision making, and c) improved shared awareness of tasks and responsibilities.

# **DESCRIPTION OF THE MODEL**

From the most relevant conclusions from the expert's opinion and the already existing theory, we can state the following concepts and components of a new model for the organisational effectiveness of non-article 5 crisis response operations' HQs:

- Assessment of the internal effectiveness of the organisation;
- Distinction between operative and official goals;
- Three-step design with a direct link from the input factors through the operative goals to the official goal of the organisation;
- Concept of internal alignment which states that the input factors must be in optimum balance to result in effective goal achievement;
- Consideration of hard (i.e., structures, processes) as well as soft (i.e., people, culture) input factors;
- Simple model that can be easily tested and applied in practice.

In an internal system approach, these requirements are combined to from a new HQ-specific effectiveness model.

### **Internal Alignment**

Effective organisations make sure their operative and official goals are aligned both in terms of their fit with the external environment and with other factors internal to the organisation. In this section, we describe the NATO HQ's internal factors that have to be aligned with its operative and official goals.

Our definition assumes the mission of NATO HQs is to support the troops on the ground. This mission can be attained by increasing effective and timely information sharing and decision making, and improving shared awareness of tasks and responsibilities. Previous research on organisational effectiveness revealed that structure, people, processes, and culture must be aligned towards these operative goals in order to effectively reaching the main goal [38]. So, NATO HQs have to make sure that the choices made regarding the NATO HQ's structure, processes, people, and culture support accomplishing the operative goals: a) increasing effective and timely sharing of information, b) increasing effective and timely decision making, and c) improving shared awareness of tasks and responsibilities. Figure 4 shows this hypothesized process.

27 - 10 RTO-MP-SAS-081

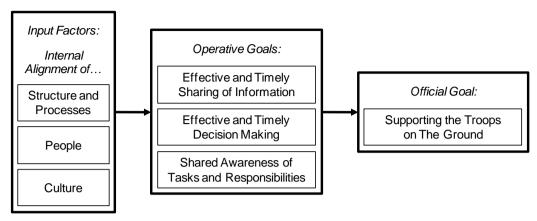


Figure 4: Model of Organisational Effectiveness of Non-Article 5 Crisis Response Operations' HQ

In the following paragraphs, we describe the three factors that have to be internally aligned to support achieving the operative goals.

#### Structure and Processes

Organisational structure is the formal system of task and authority relationships that control how people coordinate their actions and use resources to achieve organisational goals [28]. Organisational structure shapes the behaviour of people and the organisation. Organisational processes refer to the way the organisation implements its goals in the framework of the given organisational structure [37]. That is to say that processes cut across the organisation's structure; if structure is thought of as the anatomy of the organisation, processes are its physiology or functioning [19].

The environmental circumstances in which military forces have to operate are changing. Therefore, it is necessary to implement organisational changes, for example, NATO Network Enabled Capabilities (NNEC). The military needs to change into an organisation that supports agility, flexibility, jointness and interoperability. An organisational design that fits the transformed military organisation is the network organisation design. A network organisation is an organic organisational structure. Jones [28] summarizes important aspects of organic structures: Organisations with an organic organisational structure are decentralized. They have an organisational set up whereby the authority to make important decisions is delegated to persons at all levels of the hierarchy. An organic structure stimulates flexibility, so that employees can innovate and quickly adapt to changing circumstances, and take responsibility to make decisions when necessary. Roles are loosely defined; organisational members with different functions work together to solve problems and are involved in each other's activities. A high level of integration is needed to enable organisational members to share information quickly and easily. Rules and norms emerge from the ongoing interaction between organisational members. Interaction between organisational members is horizontal as well as vertical.

We assume that for NATO HQs to be able to reach its three goals (i.e. increasing effective and timely sharing of information and decision making, and improving shared awareness of tasks and responsibilities) its organisational structure and processes must be classified as organic (as opposed to mechanistic). The greater the degree to which the NATO HQ's organisational structure and processes resemble organic structure and processes, the more likely it will be to reach its operative goals.



# People

The element "People" is central to the effectiveness of an organisation, and therefore a key factor in many effectiveness models [e.g., 19, 37, 16]. Following upon the experts' feedback, we concentrate on the subfactors leadership, rotation and training.

The SMEs indicated the effectiveness of HQs is mostly a matter of the style of leadership. In numerous studies, Bass and Avolio [4] examine the impact of leadership style on effectiveness. They state that in a transformational style of leadership, the leader enhances the motivation, morale, and performance of his followers through focusing on 'transforming' his followers to help and look out for each other, to be encouraging and harmonious, and to look out for the organisation as a whole.

We assume that for the NATO HQ to be able to attain its three goals (i.e. effective and timely sharing of information, quick and timely decision making, and improved shared awareness of tasks and responsibilities) its leadership must be classified as transformational (as opposed to transactional). The greater the degree to which the NATO HQ's organisational leadership resembles transformational leadership, the more likely it will be to reach its operative goals.

Training is another key contributor to organisational effectiveness. The lack of attendance in NATO predeployment training on how to work in coalition operations can be an important barrier to organisational effectiveness in NATO HQs. Without training, individuals show a lack of competencies, do not know each other, and they have not had the chance to clarify their roles and expertise before starting working together. We are interested by whether and how much pre-deployment training affects individuals' knowledge, skills, and other behaviours, namely information sharing, decision making and shared awareness of tasks and responsibilities. Training is most likely to have a significant impact on such outcomes when delivered within a job-specific and skills-focused context. A very important aspect of NATO pre-deployment training is the process of teambuilding, as teams in multinational HOs are characterized by high heterogeneity. Overall, research on diversity and heterogeneity of teams and their effectiveness has led to inconsistent results [cp. literature reviews in: 27, 40, 48]. While some authors have discovered better solutions and performance with increasing diversity, because heterogeneous teams possess richer perspectives and greater potential [e.g., 46, 50, 34], others have demonstrated poorer integration and dissatisfaction with increasing cultural diversity which in turn negatively impacts the team's effectiveness [e.g., 25, 36, 49]. Thus, heterogeneity seems to influence team effectiveness via multiple, simultaneous factors [2, 15, 26] which can be either performance enhancing (e.g., diversity and creativity of generated solutions) or reducing (e.g., low cohesion). It is therefore extremely important that pre-deployment training promotes team cohesion so that the innovative and creative potential of its heterogeneity can be exploited. The future team members normally know which task they will be performing (i.e., functional dimension) and where they will be located in the HQ's hierarchy (i.e., hierarchical dimension) during deployment. However, they cannot position themselves within the team or organisation (i.e., central vs. peripheric position) until deployment [24]. Without integration, they cannot embrace the interpersonal activity that leads to collective strength and shared awareness, thus the participation of each member is crucial and should be encouraged as early as during pre-deployment training [3]. At that point, future team members develop shared perceptions, attitudes, and values leading to shared interpretations and understanding. Thereby, potential misunderstandings in the daily cooperation are reduced [47]. The more heterogeneous is a team, the longer its members need to develop a joint approach and communication routines [see 33].

We assume that for NATO HQs to be able to attain its three goals (i.e. effective and timely sharing of information, quick and timely decision making, and improved shared awareness of tasks and responsibilities) staffs' active participation in NATO pre-deployment training is necessary. The greater the personnel's participation in NATO pre-deployment, the more likely it will be to reach its operative goals.

27 - 12 RTO-MP-SAS-081



As already noted by the SMEs, the rotation practices in NATO HQs can be a central barrier to organisational effectiveness. They mentioned different aspects of the rotation practices such as no handover/mentoring programme, gaps of transition, difference or shortness of tour length, and national rotations that are not synced. Studies on personnel rotation revealed possible causes for negative impacts of rotation on performance. Hartman, Stoner and Arora [22] show that after each rotation the newcomers need to acquire skills and knowledge concerning structure, equipment, and processes. In addition, feelings of isolation, frustration and deprivation of a group identity [21] or difficulties in adopting new social structures and rules [13, 43] can occur among new members of the HQ. Such challenges can result in lower organisational effectiveness.

Therefore, we assume that for a NATO HQ to be able to attain its three goals (i.e. effective and and timely sharing of information, quick and timely decision making, and improved shared awareness of tasks and responsibilities) the rotation practice of the contributing nations must be coordinated and a comprehensive handover must be assured. The greater the degree to which the rotation practice achieves these issues, the more likely it will be to reach its operative goals.

#### **Culture**

Organisational culture is formed by the set of values and norms that influence its organisational members' interactions with each other and with people outside the organisation [28]. An organisation's culture can be used to increase its effectiveness [41], because organisational culture influences the way members make decisions, the way they understand and deal with the organisation's environment, what they do with information, and how they behave [12]. Organisational values are general criteria people use to establish which behaviours are desirable or undesirable [28]. Two kinds of values can be distinguished (Fig. 5). Terminal values represent outcomes people and the organisation want to achieve, such as excellence, reliability, innovativeness, stability, and predictability. The NATO HQ might adopt the terminal values flexibility and agility of processes and stability of the organisational structure as guiding principles. Instrumental values, on the other hand, are desired modes of behaviour, such as working hard, being creative and courageous, being conservative and cautious, taking risks and maintaining high standards. The NATO HQ might embrace trusting each other, being open to diversity, and having an improvement orientation as guidelines. Team members who trust each other are better able to examine and improve team processes and hence, to self-manage their own performance [18, 20]. Besides, employees report lack of trust as one reason they resist being introduced to a team in the first place, and that its absence interferes with the effective functioning of work teams [32]. NATO HQ's organisation members are characterized by high diversity in national background and expertise. High diversity within teams and organisations can cause integration problems, low cohesion and dissatisfaction, which in turn affects the team's effectiveness negatively [e. g., 25, 49]. An organisational culture that promotes being open to diversity stimulates team cohesion and allows the innovative and creative potential of the heterogeneity to be exploited. In organisations valuing an improvement-oriented culture organisational members demonstrate a high level of proactivity in trying to improve. This can lead to improved collaboration between different departments and an increased emphasis on efficient cooperation among employees.

Hence, an organisation's culture consists of the end states the organisation wants to reach (i.e., its terminal values) and the modes of behaviour it supports (i.e., its instrumental values). The NATO HQ's mission statement and official goals (i.e. supporting the troops on the ground by agility and flexibility of the processes and stability of the organisational structure) should be reflected in the terminal values it adopts. And for the NATO HQ staff to understand and be able to act in accordance with the instrumental values, the NATO HQ should develop specific norms, rules and standard operating procedures that typify its specific instrumental values.



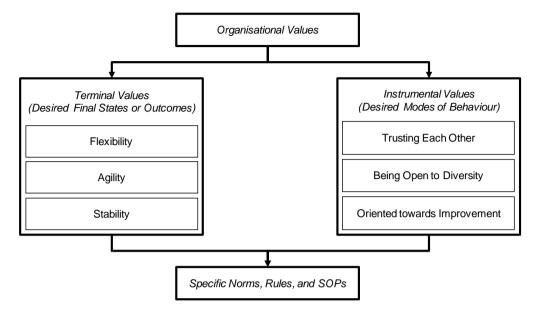


Figure 5: Terminal and Instrumental Values in A NATO HQ's Organisational Culture.

Source: [28]

We assume that for the NATO HQ to be able to attain its three goals (i.e. effective and timely sharing of information, quick and timely decision making, and improved shared awareness of tasks and responsibilities) its terminal cultural values must reflect flexibility and agility in its processes, but stability in the organisational structure, and its instrumental cultural values should include trusting each other, being open to diversity, and having an improvement orientation. The greater the degree to which the NATO HQ has developed these cultural values, the more likely it will be to reach its operative goals.

# **DESCRIPTION OF THE INSTRUMENT**

The last purpose of this paper is to outline an instrument on the basis of the above-introduced model of organisational effectiveness of non-article 5 crisis response operations HQs. It assesses the degree to which "Structure and Processes", "People", and "Culture" align with the HQ's operative goals (i.e., effective and timely sharing of information, quick and timely decision making, and improved shared awareness of tasks and responsibilities). Assessing these makes it possible to test the relationship between the input factors and the goal achievement of the HQ.

### **Operative Goals**

In order to measure the operative goals of effective and timely sharing of information, decision making, and shared awareness of tasks and responsibilities, we propose using items originating from the U.S. Surface Warfare Officers' School's Team Assessment Instrument [44]. We will select three items per construct, for a total of nine items. The 7-point rating scales will range from "Very Uncharacteristic" to "Very Characteristic". Sample items representing the information sharing, decision making, and shared awareness constructs are, respectively, "Information is shared in a timely manner, that is, in time to act on the information given," "Our decision making process fosters innovative, far-reaching decisions," and "It is clear to team members how the mission is related to overall organisational goals."

### **Structure and Processes**

As described earlier, in order for the NATO HQ to be able to attain its operative goals, its organisational structure and processes must be organic. As defined previously, an organic structure is flat, decentralized,

27 - 14 RTO-MP-SAS-081



and flexible. Thus we will assess the organisation's structure (i.e., "flatness"), decentralization, and flexibility. The three structure items, the three decentralization items, and the three flexibility items will all come from the work of Bjørnstad [6, 7, 8]. The participants will rate the nine items on 5-point rating scales with varying labels depending on the construct. Samples items assessing the structure, decentralization, and flexibility constructs are, respectively, "How would you describe the organisation's hierarchy", "In your opinion, who makes most decisions in the organisation" and "How would you describe the flexibility of the organisation in terms of switching between centralized and decentralized processes."

# **People**

Leadership. As mentioned previously, for the NATO HQ to meet its goals, its leadership must be described as transformational. We will assess transformational leadership with items originating from Bass and Avolio [5]. Transformational leadership can be described with four "I's", idealized influence (attributes/behaviours), inspirational motivation, intellectual stimulation, and individualized consideration [see 4 for more detail]. We will select three items per construct from the Multifactor Leadership Questionnaire (MLQ) [5], for a total of 15 items. The participants will rate the items on 5-point rating scales ranging from "Not at all" to "Frequently". Sample items representative of the idealized influence (both attitudes and behaviours), inspirational motivation, intellectual stimulation, and individualized consideration constructs are, respectively, "The person I am rating acts in ways that builds my respect," "The person I am rating emphasizes the importance of having a collective sense of mission," "The person I am rating talks enthusiastically about what needs to be accomplished," and "The person I am rating suggests new ways of looking at how to complete assignments."

Pre-deployment training. Also mentioned earlier was the importance of the staff's active participation in NATO pre-deployment training. We developed a dichotomous (i.e., Yes/No) screening item, "I attended NATO pre-deployment training," to classify participants who took part in NATO pre-deployment training versus those who did not. We will then ask those participants who participated in such training three additional questions, such as "My NATO pre-deployment training helped me position myself within the social network of my team." The participants will rate these items on 7-point rating scales ranging from "Strongly disagree" to "Strongly agree".

Rotation. Lastly, we will assess the rotation practices in the NATO HQ by asking the participants three questions such as "Different tour lengths make working together difficult." The participants will rate these items on 7-point rating scales ranging from "Strongly disagree" to "Strongly agree".

#### **Culture**

We suggest that, in order to reach its operative goals, the NATO HQ should develop the instrumental values of trust, openness to diversity, and improvement orientation.

Trust. Blais and Thompson [9], based on the work of Adams and Sartori [1], developed measures of trust in teams and trust in leaders to be used at the level of small military units. We will adapt the Trust in Teams Scale to the context of NATO HQs. Specifically, we will assess the constructs of benevolence, competence, integrity, and predictability, each of which is defined as a dimension of trust in teams. We will select three items per construct, for a total of 12 items, and the participants will rate these items on 7-point rating scales ranging from "Strongly disagree" to "Strongly agree". Samples items indicative of the benevolence, competence, integrity, and predictability dimensions are, respectively, "Even in tough times, my team members are supportive, "My teammates are capable at their jobs," "My teammates have strong ethics," and "I know what to expect from my team."

Openness to diversity. In order to assess the organisation's level of openness to diversity, we wrote three items such as "National differences were considered important by most members of the organisation





(reverse-scored)." The participants will rate these items on 7-point rating scales ranging from "Strongly disagree" to "Strongly agree".

*Improvement orientation.* Finally, to evaluate the level of organisational member's improvement orientation, we will use three items originating from the work of Van den Berg and Wilderom [45]. The participants will rate these items on a 7-point rating scale ranging from "Strongly disagree" to "Strongly agree". Sample items include "Employees take initiatives to improve the way in which the work is done."

# **CONCLUSION**

The purpose of this paper was to investigate potential models and tools for understanding, explaining, and measuring organisational effectiveness of coalition HQs conducting Non-article 5 crisis response operations in order to overcome challenges caused by its multinational setting.

Military and management experts define organisational effectiveness as the ability of an organisation to achieve its goals and describe an effective HQ as an organisation which a) is stimulating information sharing, b) is able to make fast and timely decisions, and c) has a common understanding of its internal tasks and responsibilities. Organisational effectiveness research show that these operative goals of a HQ can only be attained if internal factors such as structure and processes, people, and culture are strategically aligned towards them. On the basis of these assumptions we designed a model displaying this chain of goal achievement and drafted an instrument measuring organisational effectiveness in the particular context of a NATO HQ.

We believe that this instrument offers great promise in providing a diagnostic tool for improving the ability of an HQ to assess and then trace through the impact of the alignment of internal organisational structure and processes, people and culture with its mission. We also believe that this tool enables the identification of inefficiencies in coalition HQs and offers some insight into what factors are vital to address in achieving this alignment. Consequently, possible adaptations and improvements in order for the organisation to become more organisationally effective can be formulated.

The instrument needs to be tested in a coalition HQ in order to see whether we have captured the relevant components and concepts. For validation purposes, it needs to be tested in a variety of coalition HQs conducting Non-article 5 crisis response operations.

# **REFERENCES**

- [1] Adams, B. D. & Sartori, J. (2006). Validating the Trust in Teams and Trust in Leaders Scale. Defence Research and Development Canada Toronto Contract Report (CR-2006-008), ON, Canada.
- [2] Ang, S., Van Dyne, L., Koh, C., Ng, K. Y., Templer, K. J., & Chandrasekar, N. A. (2007). Cultural Intelligence: The Measurement and Effects on Cultural Judgement and Decision Making, Cultural Adaptation, and Task Performance. Management and Organization Review, 3, 335-371.
- [3] Barzantny, C. (2005). Ansätze des internationalen Teambuildings. In G. K. Stahl, W. Mayrhofer & T. M. Kühlmann (Hrsg.). Internationales Personalmanagement. Neue Aufgaben, neue Lösungen. München/Mering: Rainer Hampp Verlag. (S. 145-174).
- [4] Bass, B. M. & Avolio, B. J. (1994). Improving organisational effectiveness through transformational leadership. Thousand Oaks, CA: Sage.
- [5] Bass, B. M. & Avolio, B. J. (2004). MLQ Multifactor Leadership Questionnaire, Manual and Sampler Set (3<sup>rd</sup> Edition). Redwood City, CA: Mind Garden.

27 - 16 RTO-MP-SAS-081



- [6] Bjørnstad, A. L. (2005). Part I: Allied Warrior 2004 Pilot study and analysis of cross-cultural organizational issues. FFI/RAPPORT-2005/01709.
- [7] Bjørnstad, A. L. (2006). Battle Griffin 2005 analysis of organizational processes. FFI/NOTAT-2006/00211.
- [8] Bjørnstad, A. L. (2008). LTAMC Experiments: Assessment of culture and organizational and group processes in a simulated mission. FFI/RAPPORT-2008/00312.
- [9] Blais, A. R. & Thompson, M. M. (2009). The Trust in Teams and Trust in Leaders Scale: A Review of Their Psychometric Properties and Item Selection. Defence Research and Development Canada Toronto Technical Report (TR-2008-190), ON, Canada.
- [10] Blendell, C., Henderson, S. M., Molloy, J. J. & Pascual, R. G. (2001). Team performance shaping factors in IPME (Integrated Performance Modeling Environment). Unpublished DERA report. DERA, Fort Halstead, UK.
- [11] Boëne, B. (2003). La professionnalisation des armées: contexte et raisons, impacts fonctionnel et sociopolitique. Revue française de sociologie, 44(4), 647-693.
- [12] Cook, S. D. N. & Yanow, D. (1993). Culture and organisational learning. Journal of Management Inquiry, 2, 373-390.
- [13] DeSanctis, G. & Poole, M. (1994). Capturing the complexity in advanced technology use: Adaptive structuration theory. Organisation Science, 5(2), 121-147.
- [14] Driskell, J. E., Salas, E. & Hogan, R. (1987). A taxonomy for composing naval teams. Naval Training Systems Center, Human Factors Division (Code 712), Orlando, FL.
- [15] Earley, P. C. & Ang, S. (2003). Cultural Intelligence: Individual Interactions Across Cultures. Stanford: Stanford University Press.
- [16] Essens, P. J. M., Vogelaar, A. L. W., Mylle, J. J. C., Blendell, C., Paris, C., Halpin, S. M. & Baranski, J. V. (2005). Military Command Team Effectiveness: Model and Instrument for Assessment and Improvement. NATO RTO technical report.
- [17] Etzioni, A. (1964). Modern Organisations. Englewood Cliffs, N.J.: Prentice-Hall.
- [18] Friedlander, F. (1970). The primacy of trust as a facilitator of further group accomplishment. Journal of Applied Behavioural Science, 6, 387-400.
- [19] Galbraith, J. R. (2002). Designing Organisations. An Executive Guide to Strategy, Structure, and Processes. San Francisco: Jossey-Bass Publishers.
- [20] Golembiewski, R. T. & McConkie, M. L. (1975). The centrality of interpersonal trust in group processes. In C. L. Cooper (Ed.), Theories of group processes. New York: John Wiley. (pp. 131-185).
- [21] Harpaz, I. (2002). Advantages and disadvantages of telecommuting for the individual, organisation and society. Work Study. 51(2/3), 74-81.
- [22] Hartman, R. L., Stoner, C. R. & Arora, R. (1992). Developing successful organisational telecommuting arrangements: Worker perception and managerial prescriptions. SAM Advanced Management Journal, 57(3), 35-42.



- [23] Heinecken, L. (2005). New Missions and The Changing Character of Military Missions. Paper presented at the Biennial International 45<sup>th</sup> Anniversary Conference, Inter-University Seminar on Armed Forces and Society, 21-23 October 2005, Chicago.
- [24] Ilgen, D., LePine, J. & Hollenbeck, J. (1999). Effective decision making in multinational teams. In P.C. Earley & M. Erez (Eds.). New Approaches to Intercultural and International, Industrial/Organisational Psychology. San Francisco: The New Lexington Press. (pp. 337-409).
- [25] Jackson, S. E., Brett, J. F., Cooper, V. I., Julin, J. A., Peyronnin, K. (1991). Some differences make a difference: Individual dissimilarity and group heterogeneity as correlates of recruitment, promotions, and turnover. Journal of Applied Psychology, 76(5), 675-689.
- [26] Jackson, S. E. & Joshi, A. (2001). Research on Domestic and International Diversity in Organisations: A Merger that Works? Thousand Oaks, CS: Sage.
- [27] Janssen, M. & Brett, J. M. (2006). Cultural Intelligence in Global Teams: a Fusion model of Collaboration. Group & Organization, 13, 75-96.
- [28] Jones, G. R. (2004). Organisational theory, design, and change. Text and cases. Upper Saddle River, New Jersey: Pearson Education.
- [29] Kamp, K.-H. (2004). Eine uneinige Allianz. Die NATO vor dem Gipfel von Istanbul. Berlin: Konrad-Adenauer-Stiftung.
- [30] Klein, P. & Kümmel, G. (2000). The Internationalization of Military Life. Necessity, Problems and Prospects of Multinational Armed Forces; In G. Kümmel & A. D. Prüfert (Hrsg.). Military Sociology. The Richness of a Discipline, Baden-Baden Nomos. (S. 311-328).
- [31] Klimoski, R. & Jones, R. G. (1995). Staffing for effective group decision making: Key issues in matching people and teams. In R. A. Guzzo, E. Salas & Associates (Eds.). Team effectiveness and decision making in organisations. San Francsico: Jossey-Bass Publishers. (pp. 291-332).
- [32] LaFasto, F. & Larson, C. (2001). When teams work best: 6000 team members and leaders tell what it takes to succeed. Thousand Oaks, CA: Sage.
- [33] Lehmann, R. & Van den Berg, S. (2004). Internationale Crews: Chance und Herausforderung. Management Zeitschrift, 3, 27-32.
- [34] McLeod, P. L., Lobel, S. A. & Cox, T. H. (1996). Ethnic diversity and creativity in small groups. Small Group Research, 27(2), 248-264.
- [35] NATO. (2001). NATO Handbook 2001. Brussels: NATO.
- [36] O'Reilly, C. A., Caldwell, D. F. & Barnett, W. P. (1989). Work group demography, social integration, and turnover. Administrative Science Quarterly, 34(1), 21-37.
- [37] Peters, T. & Waterman, Jr. (1982). In Search of Excellence. New York, London: Harper & Row.
- [38] Porter, M. E. (1996). What is strategy? Harvard Business Review, 74 (6), 61-78.
- [39] Salas, E., Dickinson, T., Converse, S. A. & Tannenbaum, S. I. (1992). Toward an understanding of team performance and training. In R. W. Swezey & E. Salas (Eds.). Teams: Their Training and performance. Norwood, NJ: Ablex. (pp. 219-245).

27 - 18 RTO-MP-SAS-081



- [40] Seiler, S. (2007). Determining factors of intercultural leadership a theoretical framework. In C. M. Coops & T. Szvircsev Tresch (Eds.), Cultural Challenges in military Operations. Rome: NDC. (pp. 213-228)
- [41] Smircich, L. (1983). Concepts of culture and organisational analysis. Administrative Science Quarterly, 28, 339-358.
- [42] Szvircsev Tresch, T. (2009). Cultural And Political Challenges in Military Missions: How Officers View Multiculturality in Armed Forces. Adavances in Military Sociology: Essays in Honor of Charles C: Moskos. Contributions to Conflict Management, Peace Economics and Development, 12A, 111-137.
- [43] Tyre, M. J. & Orlikowski, W. J. (1994). Windows of opportunity: Temporal patterns of technological adaption in organisations. Organisation Science, 5(1), 98-118.
- [44] U.S. Surface Warfare Officers' School. (2003). Team Assessment Instrument. Unpublished instrument. Newport, RI: U.S. Surface Warfare Officers' School.
- [45] Van den Berg, P. T. & Wilderom, C. P. M. (2004). Defining, Measuring, and Comparing Organisational Cultures. Applied Psychology: An International Review, 53 (4), 570-582.
- [46] Van der Zee, K. L., Atsma, N. & Brodbeck, F. (2004). The influence of social identity and personality on outcomes of cultural diversity in teams. Journal of cross-cultural psychology, 35(3), 283-303.
- [47] Van Maanen, J. & Schein, E. H. (1979). Toward a theory of organisational socialization. Research in Organisational Behaviour, 1, 209-264.
- [48] Von Glinow, M. A., Shapiro, D. L. & Brett, J. M. (2004). Can we talk, and should we? Managing emotional conflict in multicultural teams. Academy of Management review, 29, 578-592.
- [49] Wagner, G. W., Pfeffer, J. & O'Reilly, C. A. (1984). Organisational demography and turn-over in top-management groups. Administrative Science Quarterly, 29(1), 74-92.
- [50] Watson, W. E., Kumar, K. & Michaelsen, L. K. (1993). Cultural Diversity's Impact on INteractin Process and Performance: Comparing Homogenous and Diverse Task Groups. The Academy of Management Journal, 36(3), 590-602.





27 - 20 RTO-MP-SAS-081